Amendments To The Claims

Please replace all prior versions of the claims with the following claim listing:

Claims:

1. (Original) A multi-channel surround sound expansion method comprising the steps of:

reading a stereo sound signal including a left sound signal and a right sound signal;

expanding said stereo sound signal into a Front L channel, a Front R channel, a Front M channel, a Rear L channel and a Rear R channel sound signals; performing a sound reverberation operation on sound signals of said Front L channel and said Front R channel or said Rear L channel and said Rear R channel to generate sound with echo/reverberation;

delaying said Rear L channel and Rear R channel sound signals for a first time value; and

advancing said Front M channel sound signal for a second time value.

2. (Original) The multi-channel surround sound expansion method as claimed in claim 1, wherein said step of expanding said stereo sound signal into multi-channel sound signals is accomplished by using a Hafler technique to output said left sound signal directly to said Front L channel, output said right sound signal to said Front R channel, output said left sound signal minus said right sound signal to said Rear L

channel, and output said right sound signal minus said left sound signal to said Rear R

channel.

3.   (Original) The multi-channel surround sound expansion method as

claimed in claim 2, wherein said Front L channel and Front R channel sound signals are

sound signals having low-frequency components filtered out through a high-pass

filtering operation.

4.   (Currently amended) The multi-channel surround sound expansion

method as claimed in claim 3, wherein the frequency response of said high-pass

filtering operation is ~~about~~ –10dB at 6KHz.

5.   (Original) The multi-channel surround sound expansion method as

claimed in claim 2, wherein said Front M channel sound signal is a sound signal having

high-frequency components filtered out through a low-pass filtering operation.

6.   (Currently amended) The multi-channel surround sound expansion

method as claimed in claim 5, wherein the frequency response of said low-pass filtering

operation is ~~about~~ -30 dB at 6 KHz.

7.   (Original) The multi-channel surround sound expansion method as

claimed in claim 2, wherein said Rear L channel and Rear R channel sound signals are

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sound signals having high-frequency components filtered out through a low-pass

filtering operation.

8.   (Currently amended) The multi-channel surround sound expansion

method as claimed in claim 7, wherein the frequency response of said low-pass filtering

operation is ~~about~~ -30 dB at 10 KHz.

9.   (Original) The multi-channel surround sound expansion method as

claimed in claim 1, wherein said step of expanding said stereo sound signal into multi-

channel sound signals is accomplished by a Hafler technique to directly output said left

sound signal minus said right sound signal to said Front L channel, output said right

sound signal minus said left sound signal to said Front R channel, output said left sound

signal to said Rear L channel, and output said right sound signal to said Rear R

channel.

10.   (Original) The multi-channel surround sound expansion method as

claimed in claim 9, wherein said Front L channel and Front R channel sound signals are

sound signals having high-frequency components filtered out through a low-pass

filtering operation.

11.   (Currently amended) The multi-channel surround sound expansion

method as claimed in claim 10, wherein the frequency response of said low-pass

filtering operation is ~~about~~ -30 dB at 10 KHz.

12.   (Original) The multi-channel surround sound expansion method as claimed in claim 9, wherein said Front M channel sound signal is a sound signal whose high-frequency components are filtered out through a low-pass filtering operation.

13.   (Currently amended) The multi-channel surround sound expansion method as claimed in claim 12, wherein the frequency response of said low-pass filtering operation is ~~about~~ -30 dB at 6 KHz.

14.   (Original) The multi-channel surround sound expansion method as claimed in claim 9, wherein said Rear L channel and Rear R channel sound signals are sound signals having low-frequency components filtered out through a high-pass filtering operation.

15.   (Currently amended) The multi-channel surround sound expansion method as claimed in claim 14, wherein the frequency response of said high-pass filtering operation is ~~about~~ -10 dB at 6 KHz.

16.   (Original) The multi-channel surround sound expansion method as claimed in claim 1, wherein said multi-channel sound signals further include a super bass channel sound signal.

17.   (Original) The multi-channel surround sound expansion method as claimed in claim 16, wherein said super base channel sound signal is obtained by using at least a low-pass filtering operation to filter out high-frequency components of said left sound signal and said right sound channel.

18.   (Original) The multi-channel surround sound expansion method as claimed in claim 1, wherein said Front M channel sound signal is a mean of said left sound signal and said right sound signal.

19.   (Original) The multi-channel surround sound expansion method as claimed in claim 1, wherein said multi-channel sound signals further include a Rear M channel sound signal.

20.   (Original) The multi-channel surround sound expansion method as claimed in claim 19, wherein said Rear M channel sound signal is a mean of said Rear L channel and Rear R channel sound signals.

21.   (Original) The multi-channel surround sound expansion method as claimed in claim 1, wherein said multi-channel sound signals further include at least a Middle L channel sound signal and at least a Middle R channel sound signal.

22.   (Original) The multi-channel surround sound expansion method as claimed in claim 21, wherein said Middle L channel sound signal is a copy of said Rear

L channel sound signal, and said Middle R channel sound signal is a copy of said Rear R channel sound signal.

23.   (Previously presented) The multi-channel surround sound expansion method as claimed in claim 1, wherein said first time value is between 10 and 20 ms.

24.   (Previously presented) The multi-channel surround sound expansion method as claimed in claim 1, wherein said second time value is between 2 and 4 ms.

25.   (Original) The multi-channel surround sound expansion method as claimed in claim 1, wherein said sound reverberation operation is accomplished through a feedback delay networks technique.

26.   (Original) The multi-channel surround sound expansion method as claimed in claim 25, wherein a plurality of delay queues and a queue matrix are provided in said feedback delay networks technique, a channel sound signal is input into said delay queues to generate a plurality of delay signals fed back to said delay queues via said queue matrix, and said channel sound signal is finally added to said channel to form a continually fed-back sound with reverberation.

27.   (Original) The multi-channel surround sound expansion method as claimed in claim 26, wherein said delay signals generated by said delay queues are obtained by setting a delay constant to said delay queues.

28.   (Original) The multi-channel surround sound expansion method as claimed in claim 26, wherein delay times generated by said delay queues are different from one another.